FIG.1

IP PACKET

PACKET CHANNEL

(FLAT-RATE CHARGING)

SPEECH SIGNAL

BEARER CHANNEL

(USAGE-BASED CHARGING)

FIG.2

CLASS A (LEVEL OF FIXED-LINE PHONE)

100ms OR LESS

CLASS B (LEVEL OF CELLULAR PHONE)

CLASS C

GENERAL IP PACKET

ALLOWABLE DELAY TIME

ALLOWABLE JITTER TIME

FIG.3 FIG.5 FIG.6 FIG.7

101 CHANNEL TYPE DETECTION SECTION

CHANNEL TYPE INFORMATION

SPEECH SIGNAL OR PACKET

103 DELAY ADDITION SECTION

104 SCHEDULER

PRIORITY INFORMATION

106 MODULATION SECTION

107 TRANSMISSION RF SECTION

FIG.4A FIG.4B

INPUT OUTPUT TIME

FIG.5 FIG.6 FIG.7

301 PROTOCOL DETECTION SECTION

302 PACKET TYPE DETECTION SECTION

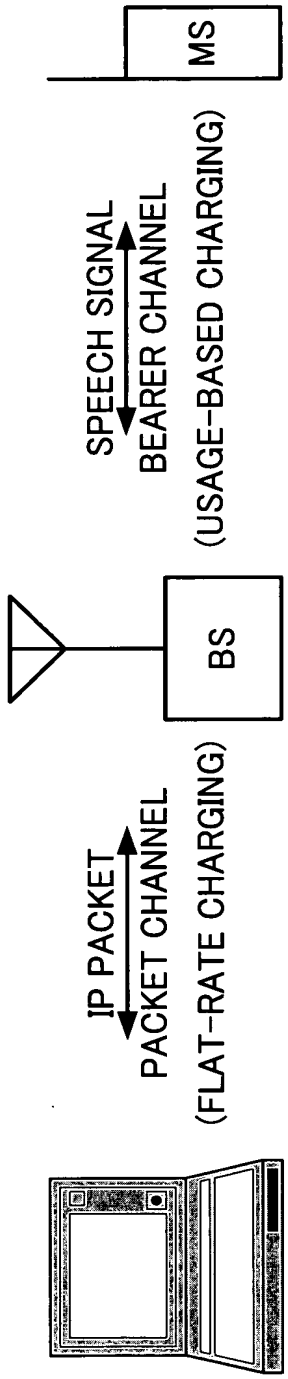
303 DELAY ADDITION CONTROL SECTION

FIG.6

401 GENERATION PERIOD DETECTION SECTION

FIG.7

CONTROL INFORMATION




PRIOR ART
FIG.1

| | CLASS A(LEVEL OF FIXED-LINE PHONE) | CLASS B(LEVEL OF CELLULAR PHONE) | CLASS C | GENERAL IP PACKET |
|---|---|---|---|---|
| ALLOWABLE DELAY TIME | 100ms OR LESS | 150ms OR LESS | 400ms OR LESS | 500ms OR LESS |
| ALLOWABLE JITTER TIME | 10ms OR LESS | 15ms OR LESS | 40ms OR LESS | 50ms OR LESS |

PRIOR ART
FIG.2

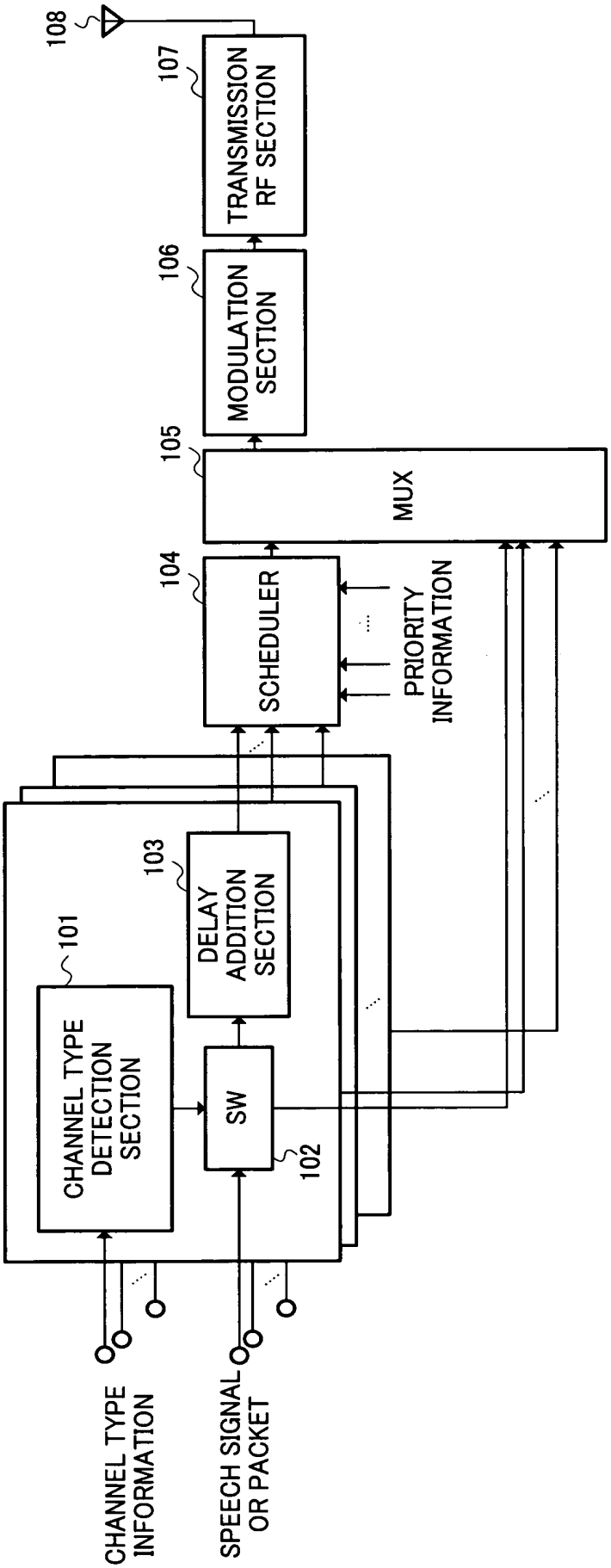

108
107
TRANSMISSION RF SECTION
106
MODULATION SECTION
105
MUX
104
SCHEDULER
PRIORITY INFORMATION
103
DELAY ADDITION SECTION
101
CHANNEL TYPE DETECTION SECTION
SW
102
CHANNEL TYPE INFORMATION
SPEECH SIGNAL OR PACKET

FIG.3

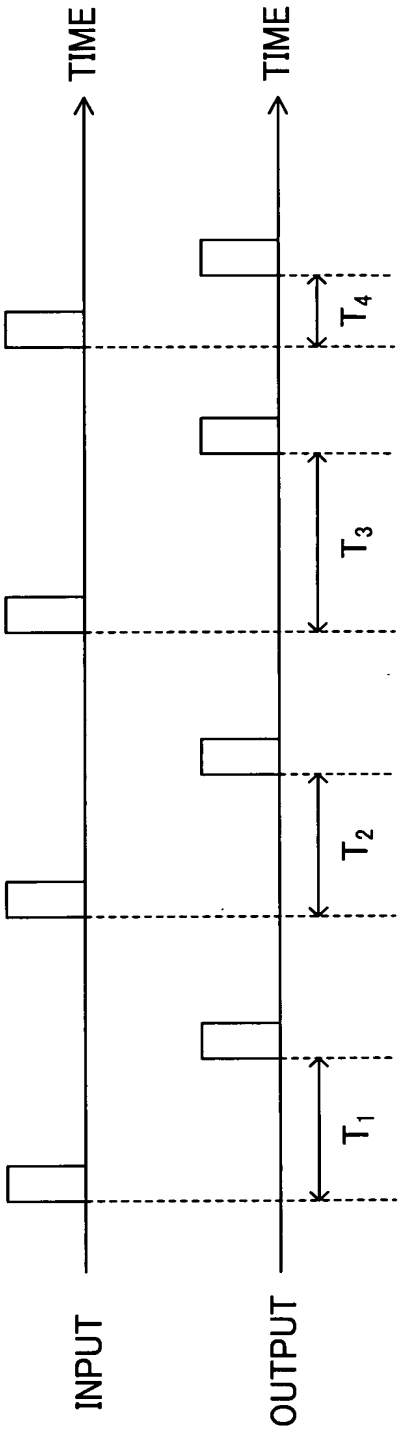



FIG.4A

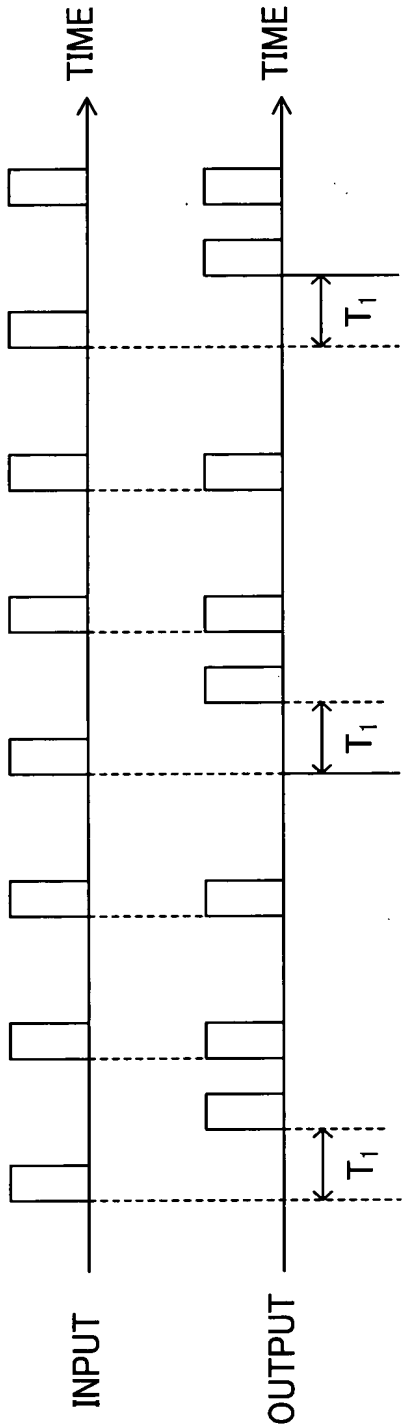



FIG.4B

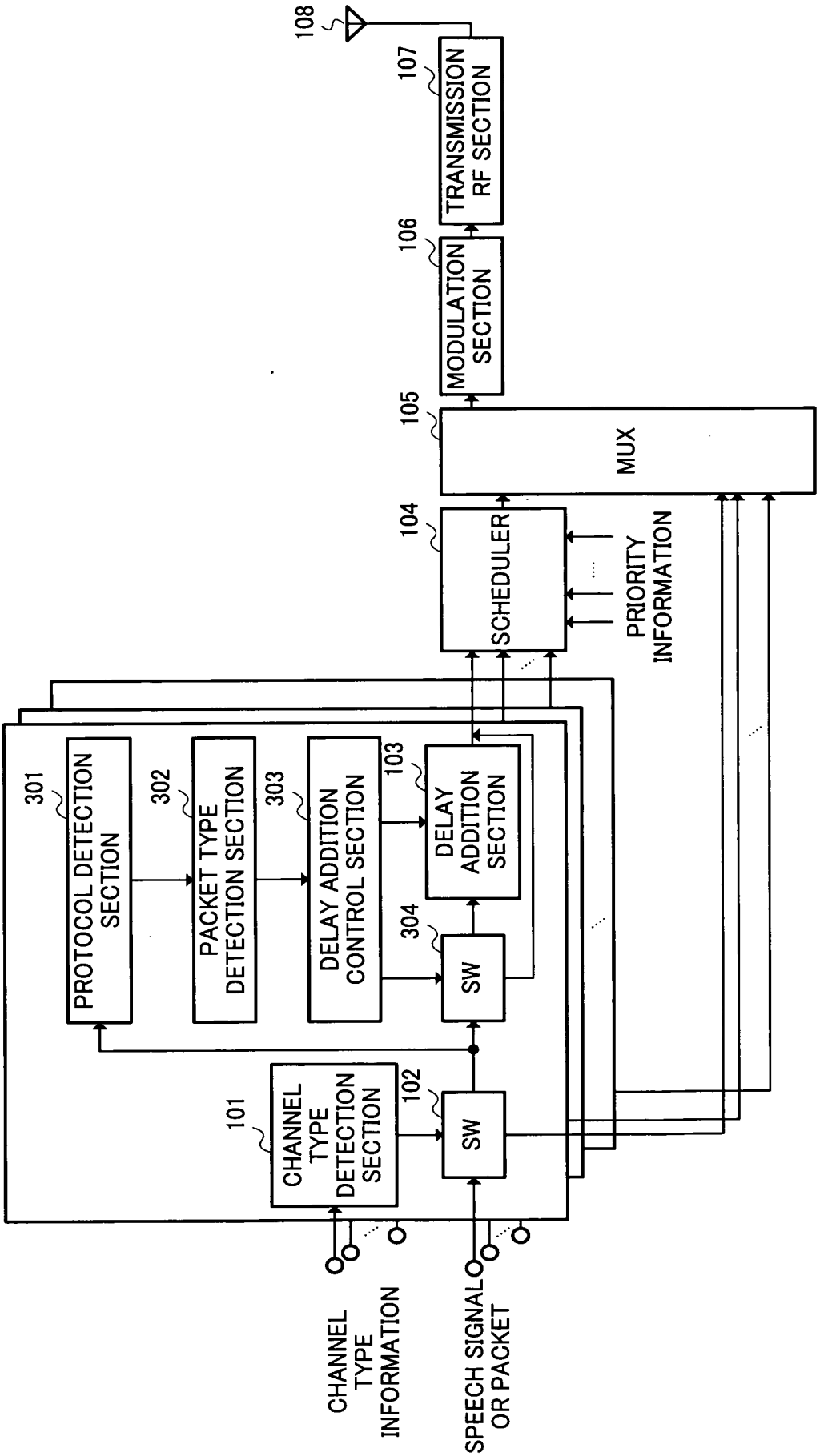

108
107
TRANSMISSION RF SECTION
106
MODULATION SECTION
105
MUX
104
SCHEDULER
PRIORITY INFORMATION
301
PROTOCOL DETECTION SECTION
302
PACKET TYPE DETECTION SECTION
303
DELAY ADDITION CONTROL SECTION
103
DELAY ADDITION SECTION
304
SW
101
CHANNEL TYPE DETECTION SECTION
102
SW
CHANNEL TYPE INFORMATION
SPEECH SIGNAL OR PACKET

FIG.5

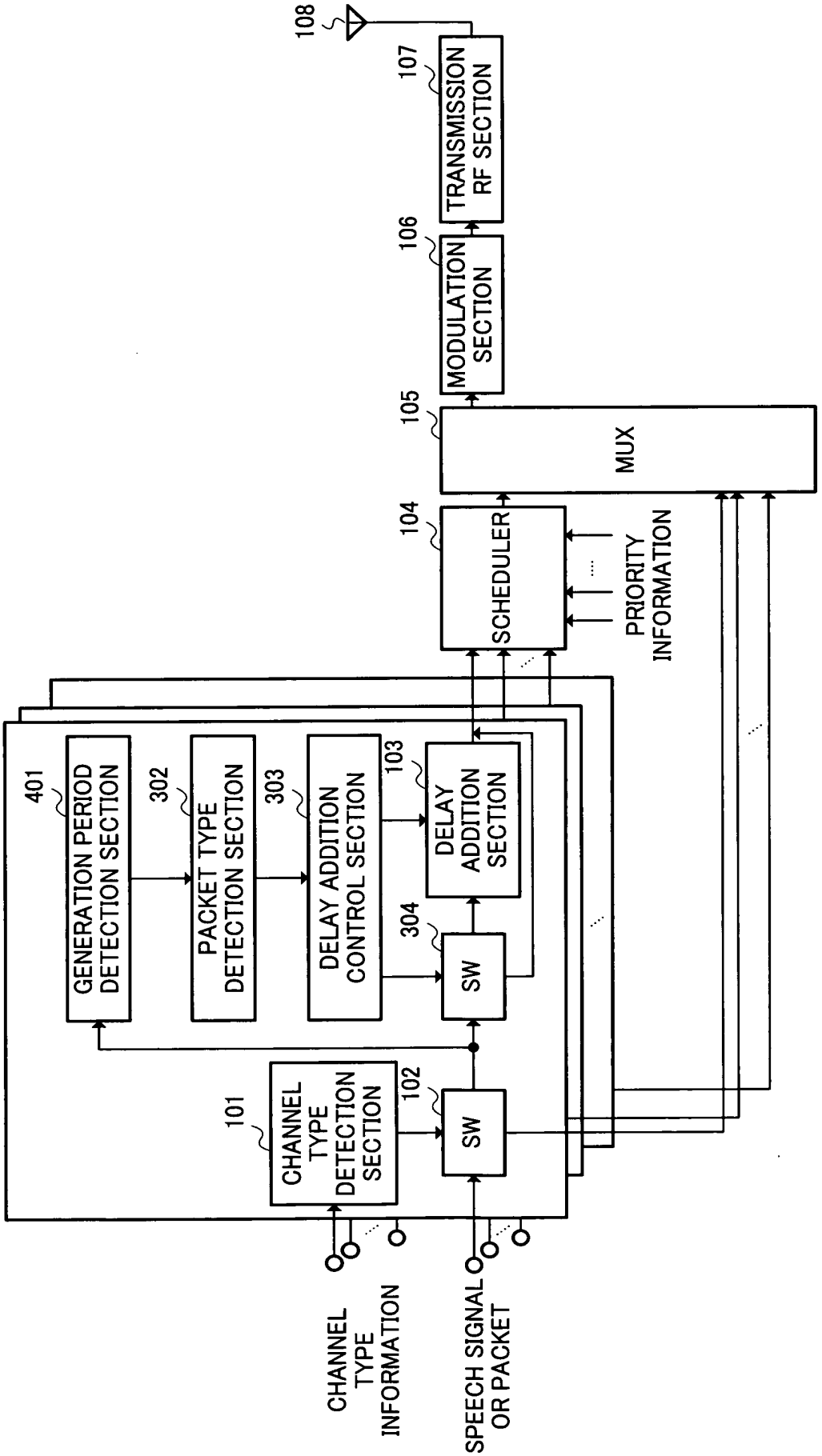

108
107
TRANSMISSION RF SECTION
106
MODULATION SECTION
105
MUX
104
SCHEDULER
PRIORITY INFORMATION
401
GENERATION PERIOD DETECTION SECTION
302
PACKET TYPE DETECTION SECTION
303
DELAY ADDITION CONTROL SECTION
103
DELAY ADDITION SECTION
304
SW
101
CHANNEL TYPE DETECTION SECTION
102
SW
CHANNEL TYPE INFORMATION
SPEECH SIGNAL OR PACKET

FIG.6

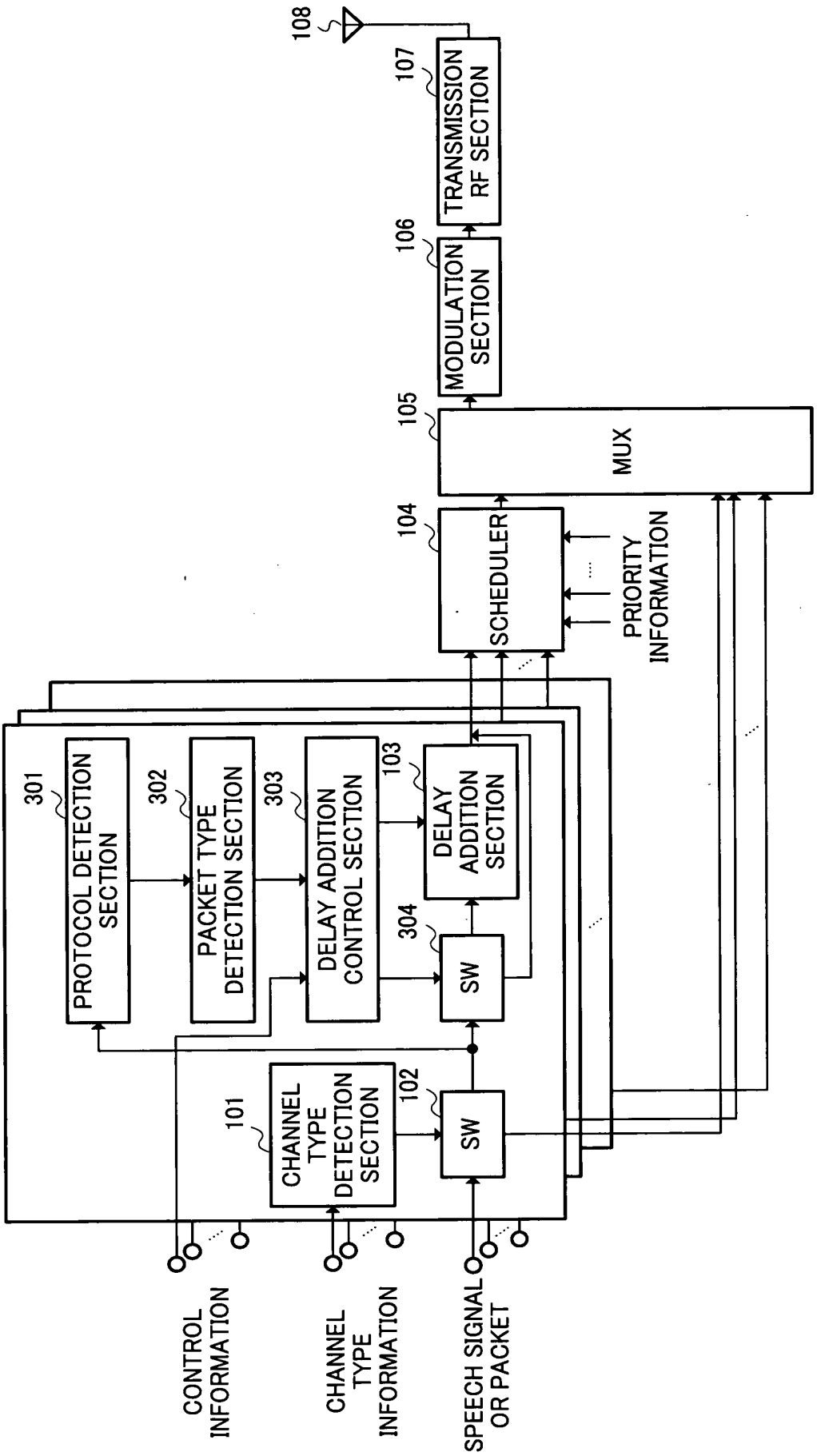

108
107
TRANSMISSION RF SECTION
106
MODULATION SECTION
105
MUX
104
SCHEDULER
PRIORITY INFORMATION
301
PROTOCOL DETECTION SECTION
302
PACKET TYPE DETECTION SECTION
303
DELAY ADDITION CONTROL SECTION
103
DELAY ADDITION SECTION
304
SW
101
CHANNEL TYPE DETECTION SECTION
102
SW
CONTROL INFORMATION
CHANNEL TYPE INFORMATION
SPEECH SIGNAL OR PACKET

FIG.7